

Remarks

After entry of this amendment, claims 1-4, 7, 9, 11, and 15-31 should be pending. Claims 5, 6, 8, 10, and 12-14 have been cancelled. New claims 21-31 have been added. Entry of the amendments and additions is respectfully requested.

I. Claim Objections

Claims 9 and 19 were objected to under 35 C.F.R. 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicants have amended claim 9 to recite the piece of splicing tape as an element of the splicing system. Since the piece of splicing tape is not a required element of the splicing system recited in claim 1, claim 9 further limits the subject matter of claim 1. Claim 19 depends from claim 9 and further claims that the piece of splicing tape comprises pressure sensitive adhesive. Since the piece of splicing tape recited in claim 9 need not comprise pressure sensitive adhesive, claim 19 further limits the subject matter of claim 9.

Claim 11 was objected to because of a typographical error. Applicants have amended claim 11 to change "spicing" to "splicing," as suggested by the Examiner.

Claims 15-18 and 20 were objected to under 35 C.F.R. 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicants have amended claims 15-17 to add the first web material and the second web material as elements of the splicing system. Claims 18 and 20 depend from claims that were amended to add the first web material and the second web material as elements of the splicing system. Claims 15-18 and 20 also recite features of the first web material and/or the second web material and thereby further limit the subject matter claim 1.

Applicants have amended claims 1-4, 7, 9, 11, and 15-20 to correct antecedent basis errors and to clarify what is claimed. These amendments were not made for any reason substantially related to patentability.

II. Claim Rejections - 35 U.S.C. § 103

Claims 1, 3, 4, 7, 9, and 15-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,244,321 (Sakamoto) in view of U.S. Patent No. 3,738,587 (Cristiani). Claims 2 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakamoto in view of Cristiani and U.S. Patent No. 5,573,626 (Rossini et al.). Applicants respectfully traverse these rejections.

Applicants have amended claim 1 to clarify that the splicing system comprises two staging areas and that both of the staging areas are capable of holding an end portion of the web material in a fixed position. Support for this amendment can be found, for example, in the specification at page 6, lines 6-11 and in originally filed claims 12-14.

The staging areas in Applicants' newly amended claim 1 are not disclosed in Sakamoto. In discussing the prior art, Sakamoto describes a pair of feed belts that support two pieces of web material moving toward a pair of feed rollers (Figure 1). Sakamoto states that "a leading end 1'a of the web 1' is delivered to the feed rollers 6 and 6' in a manner such that it is retained on the feed belt 5' by suction..." (column 3, lines 60-62). The feed belts described in Sakamoto are different than the staging areas recited in Applicants' claim 1. The feed belts do not appear to be capable of holding the web material in a fixed position. Unlike Applicants' staging areas, the feed belts described in Sakamoto are in motion while holding the web material, as indicated by the arrows in Figure 1. Rather than staging the web material, the feed belts actually deliver the web material to the feed rollers.

The staging areas in Applicants' newly amended claim 1 also distinguish Cristiani. Cristiani discloses one staging plate (Figure 1) in contrast to Applicants' dual staging areas. Because it only has one staging plate, the apparatus described in Cristiani can only be reset by transferring the new bobbin into the position of the exhausted bobbin (column 4, lines 2-6). The splicing system disclosed in Applicants' claim 1 does not require that the position of the spindles be switched after one spindle is exhausted. This is advantageous because it reduces the number of moving parts in the splicing system and avoids potential interruptions in the flow of web material.

It would not have been obvious to one of ordinary skill in the art to modify Cristiani to include two staging areas. Nor would it have been obvious to one of ordinary skill in the art to modify Sakamoto to include staging areas that are capable of holding the web material in a fixed position.

Applicants' claim 1 also is distinguished from Sakamoto because the feed rollers described in Sakamoto do not open and close around the web material. In contrast, Applicants' pinch rollers are spaced apart and form a splice by coming together. Cristiani does disclose a pair of rollers similar to Applicants' pinch rollers in that they are spaced apart and come together to form a splice (Figure 1 and column 3, lines 20-22). Still, it would not have been obvious to one of ordinary skill in the art to combine this feature of Cristiani with the features disclosed by Sakamoto, because there is no suggestion or motivation for this combination.

Rossini et al. is relied upon by the Examiner for disclosing rollers that put a reverse curl on web material as it is unwound from a roll. Rossini et al. also is relied upon by the Examiner for disclosing a tape applicator for applying adhesive coated web to cartons with a splicing system to ensure continuous feeding of the tape. Rossini et al. does not disclose staging areas, as recited in Applicants' claim 1, so it does not affect the above-analysis regarding the patentability of claim 1 over Sakamoto in view of Christiani.

III. Dependent Claims

All rejected dependent claims depend from claim 1 and are allowable for the reasons stated for claim 1. Each of the dependent claims is further allowable because of the patentable combination of features recited in such dependent claim.

Applicants have amended claim 3 to state that the staging areas comprise plates. Support for this amendment can be found, for example, in Figure 1. As acknowledged by the Examiner, the feed belts described in Sakamoto are not plates. Cristiani does disclose a plate-like structure for staging the web (Figure 1, suction guide 5). Applicants contend that the feed belts described in Sakamoto are not functionally equivalent to the suction guide described in Cristiani. Unlike the feed belts described in Sakamoto, the suction guide in Cristiani is not capable of advancing the web material. If the feed belts described in Sakamoto were replaced with suction guides, the

leading end of the new roll of web material would never reach the feed rollers. Because the apparatus described in Sakamoto does not stage the leading end of the new roll of web material, it would not have been obvious to one of ordinary skill in the art to modify Sakamoto to substitute staging plates for the feed rollers.

Applicants' claim 7 was amended to state that at least one of the pinch rollers is attached to a spring that compresses when the pair of rollers come together to form the splice. Support for this amendment can be found, for example, in the specification at page 7, lines 5-8. None of the references cited by the Examiner disclose this feature. Supporting at least one of the pinch rollers on a spring allows the splicing system to accommodate webs of varying thicknesses.

Applicants' claim 9 recites a piece of splicing tape positioned on the end portion of the first or second web material having an unattached portion extending between the pair of pinch rollers. Sakamoto discloses the use of double-sided tape to aid in splicing (column 4, lines 1-4) and Christiani discloses an adhesive tongue to aid in splicing (Figure 1, adhesive tongue L). Neither Sakamoto nor Christiani discloses a piece of splicing tape with an unattached portion. Applicant's claim 19 specifies that the splicing tape comprises pressure sensitive adhesive. This is advantageous because the pressure sensitive adhesive is only activated when the pinch rollers come together around the web material.

Applicants' claims 15-18 and 20, as discussed above, recite the web material as an element of the splicing system and further claim the features of the web material. The web materials described in claims 15-18 and 20 are well suited for incorporation into the splicing system.

IV. Allowable Subject Matter

Claims 5, 6, 8, and 10 were objected to as being dependent upon a rejected base claim, but, according to the Examiner, would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

Applicants have cancelled claim 5 without prejudice and rewritten claim 5 in independent form as new claim 21. New claim 21 incorporates the limitations cited by the Examiner in the statement of reasons for the indication of allowable subject matter, as well as the other

limitations from claim 1 prior to amendment and former claim 5. Some of these limitations, however, have been modified slightly for reasons unrelated to patentability. For example, new independent claim 21, unlike former claim 5, does not include means plus function limitations. New claim 21 also specifies that the motor can move the anvil against the first or second web material and withdraw the anvil from the first or second web material.

Applicants have cancelled claims 6, 8, and 10 and rewritten these claims in dependent form as new claims 22, 23, and 24, respectively. New claims 22, 23, and 24 depend from new claim 21. The limitations in new claims 22, 23, and 24 generally track the limitations of former claims 6, 8, and 10 with minor changes for the sake of clarity.

V. New Claims

Applicants have added claims 21-31 to further claim the patentable features of the present invention, including the allowable subject matter of former claims 5, 6, 8, and 10, as discussed above. Support for new claims 21, 22, 23, and 24 can be found in former claims 5, 6, 8, and 10, respectively. Support for new claim 25 can be found, for example, in Figure 1. Support for new claims 26 and 27 can be found, for example, in the specification at page 5, lines 6-11. Support for new claims 28 and 31 can be found, for example, in the specification at page 7, lines 23-32. Support for new claim 29 can be found, for example, in the specification at page 6, lines 6-11, Figure 1, and in originally filed claims 1 and 12-14. Support for new claim 30 can be found, for example, in the specification at page 6, lines 6-9.

VI. Drawings

Applicants have amended FIG. 3 to remove reference numeral 121, which does not appear in the specification.

VII. Supplemental Information Disclosure Statements

Applicants have submitted several supplemental information disclosure statements since the Examiner prepared the March 1, 2004 Office action. Applicants wish to call the Examiner's attention to the Fourth Supplemental Information Disclosure Statement mailed on February 24,

2004, the Fifth Supplemental Information Disclosure Statement mailed on February 25, 2004, and the Sixth Supplemental Information Disclosure Statement mailed on May 14, 2004.


Consideration of the references cited in these supplemental information disclosure statements is respectfully requested. To this end, Applicants asks the Examiner to provide initialed copies of the respective Form-1449s.

VIII. Conclusion

For the above set out reasons, it is respectfully submitted that all of the claims now in the application define over the cited prior art, are neither anticipated nor made obvious by the prior art, and should be allowable. A Notice of Allowance is respectfully requested.

Respectfully submitted,

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